



All Experimenters' Meeting

NuMI Target Situation/Status

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Week of April 11 to April 18

- 1) On Monday April 11 the removal of the upstream target baffle from the carrier, and the removal of the upstream beryllium window for access into the can region was completed. Total Staff exposure was under about 14mr for this work.**
- 2) Bore scopes were used to inspect the interior of the target can. Pictures of the bore scope monitor were recorded from the video tapes.**
- 3) On Tuesday April 12 the Alignment staff measured the locations of the target cooling tubes with respect to the nominal beam location. It was determined that they DID NOT extend into the beam region and WERE almost completely shadowed by the upstream baffle.**
- 4) Attempts to locate the leak, first with pressurized Helium, and then water in the cooling tubes have been unsuccessful; the leak appears to be plugged.**



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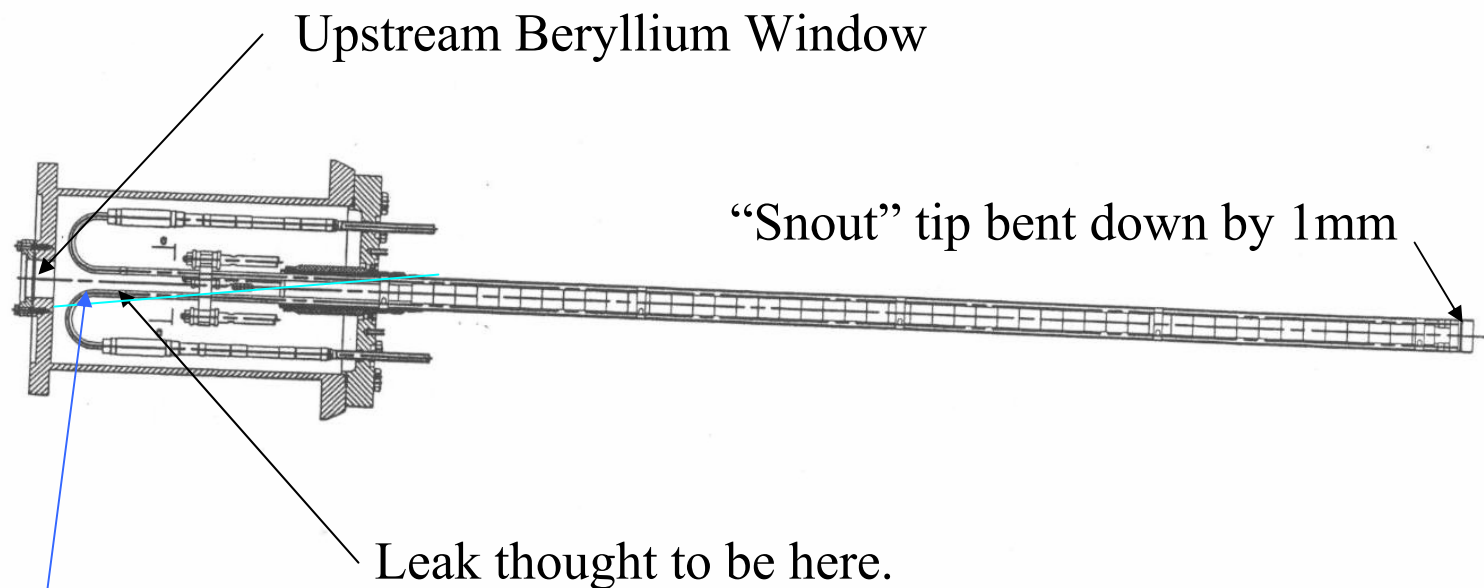


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THE NuMI TARGET



Water level here when viewed with optical probe.



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Plans for week of April 18

- 1) The plan is now to return the target module into the beam using pressurized Helium in the vacuum space, and to lower the water pressure so that if the leak redevelops it will be contained.
- 2) A modification to the upstream beryllium window is being made to mount it on a new spool piece with a new vacuum port "T" (actually the pressurized Helium port.) This will allow a relocation of the "inlet" to the bottom of the can so that if the can is again flooded it can be pumped out.
- 3) Perhaps by Wednesday the module will be reinserted into the target pile and a low power/low intensity scan will be made with beam. We will run with pressurized Helium rather than vacuum.
- 4) If/when the leak reappears we will then consider using the English "stop leak".



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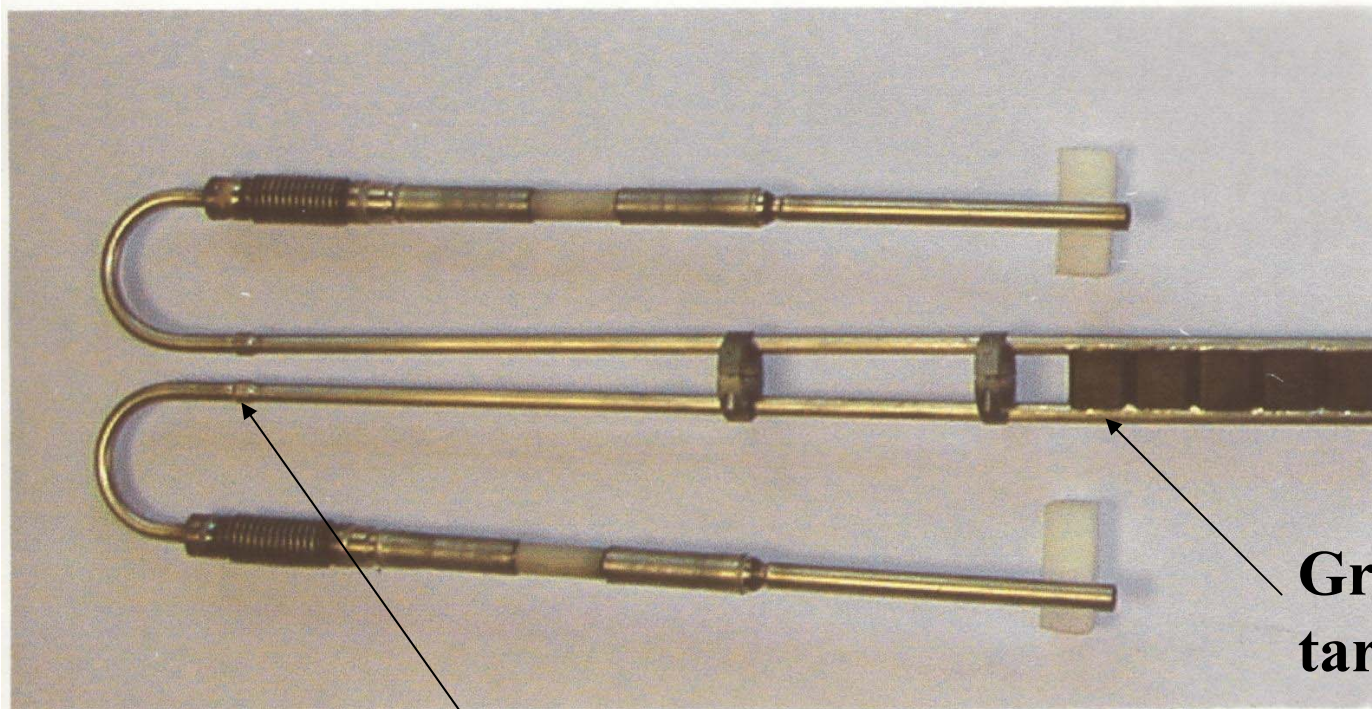
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Longer term:

- 1) Modifications to the second (spare) target are being considered.**
- 2) An air cooled (lower power/lower intensity) back up target is being designed and built. Different materials require the MINOS Experiment to consider the use of this alternate target.**
- 3) Given the very long lead times involved, additional spare target materials have been ordered, and arrangements for production in Russia are being negotiated.**

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The NuMI Target



**Graphite
target tiles**

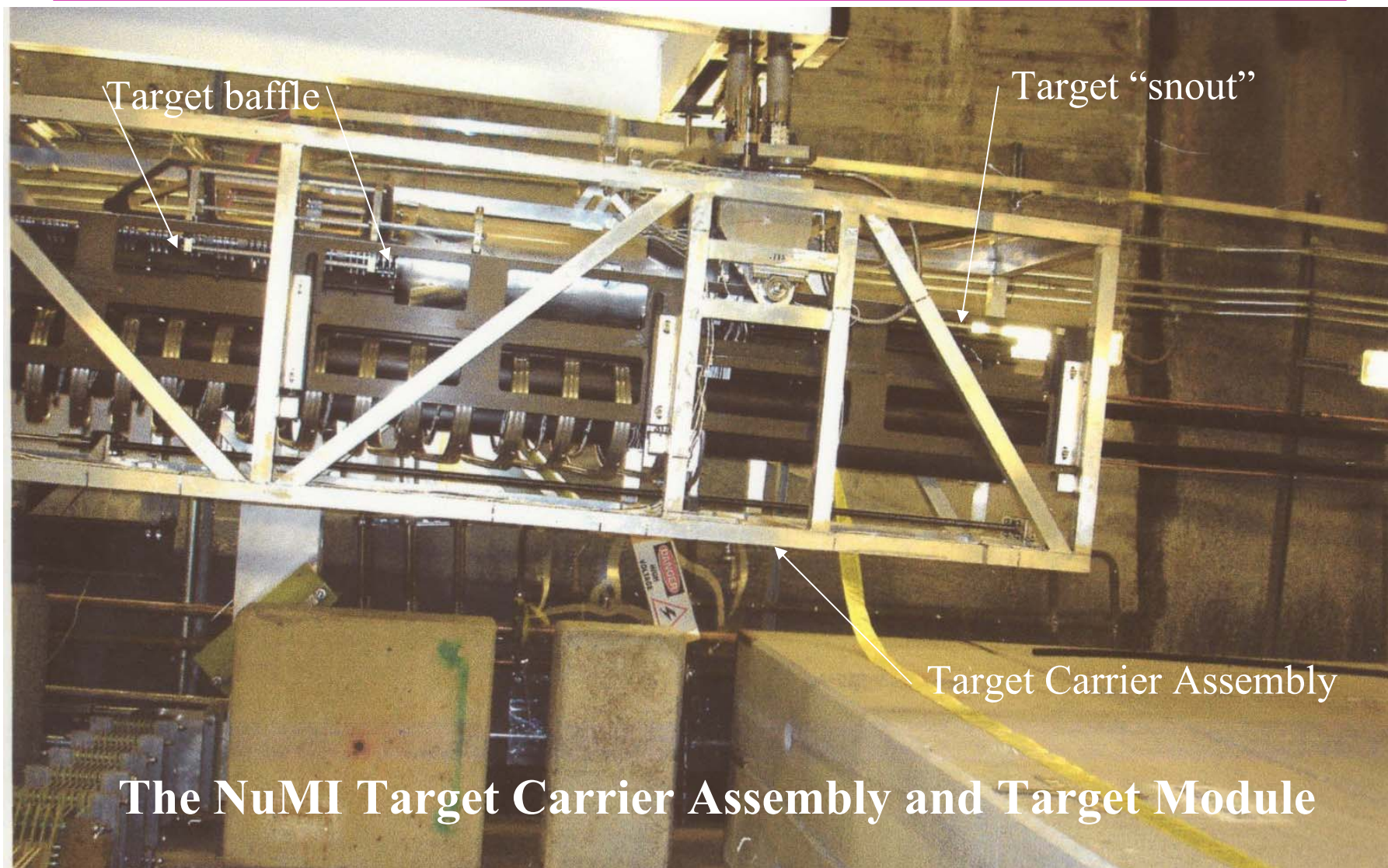
Leak thought to be here



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The NuMI Target Carrier Assembly and Target Module